

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

BP EXPL GC 2
JAY S. HAMMOND, GOVERNOR

POUCH 0 - JUNEAU 99811

January 29, 1981
CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

RECEIVED
FEB 10
ALASKA OPERATIONS

Mr. Herman A. Schmidt
Manager Lands
SOHIO Alaska Petroleum Company
Pouch 6-612
Anchorage, Alaska 99510

Dear Mr. Schmidt:

The Department has reviewed your January 2 and 23, 1981 request to amend Air Quality Control Permits to Operate for operation of the equipment to be actually ordered and installed at the Central Power Station, Gathering Centers 2 and 3 and West Seawater Injection Plant and the Radian Corporation Technical Note Air Quality Impacts in the Prudhoe Bay Oil Field Resulting from an Exchange of Emission Sources dated 3 December 1980. We have also re-evaluated the August 2, 1978 PSD Permit Application for the Construction of Additional Facilities at the Prudhoe Bay Oil Field prepared by Dames & Moore, the Radian Corporation PSD Permit Application for the Prudhoe Bay Unit Produced Water Injection, Low Pressure Separation and Artificial Lift Project and PSD Permit Application for the Prudhoe Bay Waterflood Project each dated 28 September 1979.

Based on this evaluation, the Department has determined that:

- a) The total emissions of particulate matter, sulfur dioxide, nitrogen oxides and carbon monoxide from these four facilities will be less than that analyzed in the PSD applications previously submitted and upon which the granting of Permits to Operate was previously based.
- b) Sulfur dioxide and particulate matter emissions from the turbines and heaters will not exceed the standards specified in 18 AAC 50.050, so long as natural gas is the only fuel burned.
- c) Emissions of nitrogen oxides, carbon monoxide and particulate matter will meet the requirements of previous best available control technology determinations made by the U.S. Environmental Protection Agency.
- d) The localized increases in emissions of particulate matter, sulfur dioxide, nitrogen oxides and carbon monoxide at Gathering Center 2 and the West Seawater Injection Plant will not cause violations of the Alaska Ambient Air Quality Standards and increments established in 18 AAC 50.020.

Therefore, amended Permits AQC-185E, 352E, 353D, and 533A are granted for the construction, installation, and operation of the turbines and heaters at the Central Power Station, Gathering Centers 2 and 3, and the West Seawater Injection Plant. Please note these permits expire January 30, 1985 and you should request renewal at least thirty days prior to that date.

USEPA REG



0000214

The new turbines must also comply with certain federal standards promulgated in 40 CFR 60 Subpart GG on September 10, 1979. Please contact Mr. James Sweeney of the U.S. Environmental Protection Agency Alaska Operations Office in Anchorage at 271-5083, for specific requirements. These facilities must also be reviewed for compliance with the Prevention of Significant Deterioration provisions of the Clean Air Act Amendments of 1977 and regulations at 40 CFR 52.21 dated 7 August 1980. Mr. Michael M. Johnston of the U.S. Environmental Protection Agency Region X Office in Seattle, is responsible for this review.

You have a right to an adjudicatory hearing to contest the Department's action. A request for an adjudicatory hearing must be made within 30 days of receipt of this letter by mailing or delivering a statement of issues to the Alaska Department of Environmental Conservation, Pouch O, Juneau, Alaska, 99811. The statement of issues must state the basis for the hearing request and otherwise conform with AS 44.62.370. A failure to request a hearing within 30 days of receipt of this letter constitutes a waiver of your right to administrative or judicial review of this action.

Sincerely,

C. Deming Cowles

C. Deming Cowles
Deputy Commissioner

Enclosure: AQC-185E
AQC-352E
AQC-353D
AQC-533A

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL
PERMIT TO OPERATE

Permit No. AQC-352E
Amends Permit No. AQC-352D

Date of Issue: *January 29, 1981*

The Department of Environmental Conservation, under the authority of AS 46.03 and 18 AAC 50.400 issues an Air Quality Control Permit to Operate to

SOHIO ALASKA PETROLEUM COMPANY
POUCH 6-612
ANCHORAGE, ALASKA 99502

for the operation of Gathering Center No. 2, associated fuel burning equipment and emergency flaring system as listed in Exhibit A of this permit and described in the BP-Alaska Inc. Air Quality Control Permit to Operate Application dated March 9, 1975, Data Submittal Forms dated March 6, 1975 and March 25, 1977, Technical Report dated August 5, 1975 amended September 8, 1976, letter dated March 25, 1977, SOHIO Petroleum Company letters (with attachments) dated March 13 and November 27, 1979, Radian Corporation "PSD Permit Application for the Prudhoe Bay Unit Produced Water Injection, Low Pressure Separation and Artificial Lift Project" dated 28 September 1979, SOHIO Alaska Petroleum Company letter with attachments dated March 20, 1980 and Radian Corporation Technical Note "Air Quality Impacts in the Prudhoe Bay Oil Field Resulting from an Exchange of Emission Sources" dated 3 December 1980, and SOHIO Alaska Petroleum Company letter dated January 23, 1981.

Located at Section 16; T11N, R13E, (UM) Prudhoe Bay, Alaska

Under the conditions:

1. Permittee shall comply with the State Ambient Air Quality Standards and increments established in Section 020 and the applicable emission limitations specified in Section 050 of the State Air Quality Control Regulations 18 AAC 50.
2. Air Contaminant Emission Reports, as described in Exhibit A, shall be submitted to the Department semiannually by January 30 and July 30 each year.
3. Permittee shall maintain and operate all fuel burning equipment to provide optimum fuel burning efficiency during all operating periods.
4. In the event of an Emergency Shut Down of the Gathering Center and subsequent failure of the automatic well shut-in systems, open burning of flammable liquids is permitted.
5. The Department, with permittee's approval, is allowed access to permittee's facilities to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit and State environmental laws and regulations.
6. A copy of this permit shall be clearly displayed, and the State Air Quality Control Regulations 18 AAC 50 kept on file, at the permitted facility location.

This permit expires 30 January 1985 and may be suspended or revoked in accordance with 18 AAC 50. 310.

EXHIBIT A
PERMIT TO OPERATE AQC-3500
AIR CONTAMINANT EMISSION REPORT

A notarized Air Contaminant Emission Report shall be submitted to the Department semiannually by January 30 and July 30 each year. The report shall include, but not be limited to, the following information.

NAME OF FIRM
LOCATION OF FACILITIES
PERIOD OF REPORT

| 1st month | 2nd month | 3rd month | 4th month | 5th month | 6th month |
|--------------|--------------|--------------|--------------|--------------|--------------|
|--------------|--------------|--------------|--------------|--------------|--------------|

1. DAYS OPERATED (number of hours or days)
2. FUEL CONSUMPTION
 - a) 6 natural gas heaters (total mmcf for these units)
purchased prior to
7 Aug 1978 totaling
95.12 mm Btu/hr
 - b) 13 natural gas turbines (total mmcf for these units)
purchased prior to 7 Aug 1977
totaling 251,100 HP

5 natural gas heaters
purchased after 7 Aug 1977
totaling 443 mm Btu/hr
 - c) 4 emergency engines/pump (gallons)
 - d) flaring system (hours flaring and mmcf gas
other than pilot/sweep gas)
- 3 a. Summarize and report the results of each sulfur dioxide emissions test, if performed pursuant to 40 CFR 60.333, including: date, testing method, turbine designation, fuel burning rate, fuel analysis, number of sampling points, average measured concentration and emission rate of SO₂ and O₂, and the concentration of SO₂ corrected to 15% oxygen.

b. Summarize and report the results of each nitrogen oxides emissions test, if performed pursuant to 40 CFR 60.332(a), including: date and time, test method, analyzer type and serial number, ambient temperature, humidity and pressure, turbine designation, fuel burning rate, fuel analysis, number of sampling points, average measured concentration and emissions rate of NO-NO₂ and O₂ and concentration of NO_x corrected to 15% oxygen.
4. Attach a summary of any monitoring data assembled and excess emissions reports prepared if done pursuant to requirements specified in 40 CFR 60.334.
5. Report to the Regional Environmental Supervisor, Northern Regional Office, P.O. Box 1601, Fairbanks, Alaska 99707, phone (907-452-1714), open burning of flammable hydrocarbon liquids as a result of an emergency shut down (ESD) within twelve (12) hours of the incident.

permit to Operate AQC-352E Exhibit A (cont)

6. Attach a detailed description of equipment failures or operating conditions which may have adversely affected air contaminant emissions. A preliminary report of the incident shall be submitted to the Regional Environmental Supervisor, Northern Regional Office, P.O. Box 1601, Fairbanks, Alaska 99707, phone (452-1714) within five (5) working days of the incident.

Include such information as: date of incident, duration, nature of the occurrence, equipment failures, steps taken to minimize emissions, measures taken to avoid recurrence, and a general description of the weather. A separate report is required for each incident.

7. Signature of authorized agent preceded by the statement: "I _____, being first duly sworn, hereby certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete and accurate."

8. Notarization: "Subscribed and sworn to before me this _____ day of _____ (month), _____ (year) _____ (city & state)."

Notary Public's Signature,
commission, date of expiration,
seal.